

# The Conference Report of IV Scientific-Training Conference: "Innovative Medical Technologies – Importance and Application", Lublin 18-19 November 2016

Michał Filip<sup>1</sup>, Tomasz Zuzak<sup>1</sup>, Dorota Turek<sup>1</sup>,  
Anita Wdowiak<sup>2</sup>, Olga Palij<sup>2</sup>, Valery Filipowski<sup>2</sup>

<sup>1</sup> Diagnostic Techniques Unit, Faculty of Health  
Sciences, Medical University, Poland

<sup>2</sup> Lviv Railway Hospital, Ukraine

**European Journal  
of Medical Technologies**

2017; 1(14): 56-61

Copyright © 2016 by ISASDMT  
All rights reserved

www.medical-technologies.eu  
Published online 20.04.2017

On 18th of November 2016 took place in the Crown Court in Lublin, the scientific and training conference entitled "Innovative Medical Technologies – Meaning and Application. The conference's organizers were: Laboratory of Diagnostic Techniques, Faculty of Health Sciences, Medical University of Lublin, Chair and Department of Nursing Management, Faculty of Health Sciences, Medical University of Lublin, Department of Public Health, Faculty of Health Sciences, Medical University of Lublin, Department of Regional and Regional Geography. University of Life Sciences in Lublin, Faculty of Law and Administration, UMCS in Lublin, Faculty of Electrical and Computer Engineering, Lublin University of Technology, Medical University of Rzeszow, International Society for the Advancement and Development of Medical Technologies, Polish Society Social Medicine and Public Health. The honorary patronage of the Conference was taken over by the Cluster of Lublin Medicine. The purpose of the conference was to present

various aspects of the use of diagnostic techniques in the treatment of infertility: both surgery and assisted reproduction techniques. The topics were discussed: legal conditions for the use of new technologies in medicine, current trends in medical tourism, pressing public health problems. The topic of the application of electrical engineering and computer science in medicine and environmental protection was also discussed. Various aspects of telemedicine were also mentioned. The meeting attracted several dozen participants, including representatives of leading infertility treatment centers in Poland and abroad, among others: Prof. dr hab. n. med. Jerzy Radwan, prof. dr hab. Grzegorz Jakiel, dr hab. n. med. Michał Radwan and representatives of the Intersono Clinic in Lviv. Conference ended on November 19 in the Medical Center Ovum, it took place workshop of the diagnosis of male infertility.

The conference launched the New Technologies for Infertility Treatment session, which began with the

presentation of Dr hab. n. med. Grzegorz Polak on the role of laparoscopy in the diagnosis and treatment of infertility. He pointed out that laparoscopy is mainly used to verify fallopian tube occlusion or diagnosis and treatment of endometriosis, which is an important factor in female infertility. The author also highlighted the importance of laparoscopy for ineffective pharmacological ovarian induction in women with polycystic ovarian syndrome as laparoscopic ovarian cauterization is a valuable alternative to ovulation stimulation.

In the presentation "Pregnancy and children after infertility treatment" dr hab. Michał Radwan presented up-to-date information on the impact of infertility treatment through medically assisted procreation on perinatal outcomes and on the development of children. The author claims that currently scientific evidence indicates that infertility is an independent risk factor for perinatal complications irrespective of treatment medically assisted procreation. Possible imprinting disorders and accompanying abnormalities in

offspring are very rare in both pediatric populations whose parents have been treated with medically assisted procreation methods and without infertility.

Another lecture was delivered by dr n. med. Piotr Szkodziak. It concerned the use of embolization of uterine arteries for the treatment of uterine fibroids. He noted that about 25% of women in the reproductive age have fibroids and in the menopausal period, up to 40%. Uterine fibroids that do not produce symptoms are subjected to medical supervision only. However, if symptoms are obstructive to daily activity or are likely to cause infertility, then treatment should be given. Among treatment methods, in addition to pharmacological and surgical treatment, there is minimally invasive treatment, including intrauterine embolisation (UAE). Embolization of the uterine arteries is performed under the control of digital angiography and involves the insertion of a venous catheter from the groin to the femoral artery, the aorta, the internal iliac artery, and the uterine artery.



**Photo 1.**  
Joint photo of delegation from Ukraine with conference organizers

Embolization continues until the blood flow in the vessel is completely closed. The clinical efficacy index for this procedure in the treatment of excessive menstrual bleeding, pelvic pain, and tumor-associated compression symptoms are respectively 81-96%, 70-100% and 46-100%, respectively.

After a short break, another session was held, Assisted Reproductive Technology. The session was started by dr hab. n. med. Artur Wdowiak presentation: "Security of IVF procedures". He pointed out that extracorporeal fertilization treatments are currently the most effective method of infertility treatment. Minimizing invasive IVF is a major factor that can increase your chances of getting pregnant and having a healthy baby after that procedure.

In the presentation entitled "IFV program with vitrified ova. Maternity surrogacy" Uliana Dorofeyeva from the Intersono Clinic in Lviv told about the work of the clinic, which deals with surrogacy and

donation of eggs. The author mentioned many advantages of using the services of the clinic, among others: the legality of surrogacy motherhood in Ukraine, the proximity of the Polish frontier, full service package, legal support, compliance of the quality system of the clinic with European standards. She highlighted the growing problem of infertility among young couples and the increasing number of couples with idiopathic infertility, whose only solution could be adoption or surrogacy.

At 9.15 in a small room began a session on legal conditions in medical technology. Dr. Jolanta Pacian's session began with a brief lecture on patient rights in accessing new medical technologies. In her speech, she touched on the innovativeness of new treatments and their correlation with cost and fair access. Dr. Pacian pointed out that the European Union is obliging Member States to increase the availability of new technologies to their citizens.

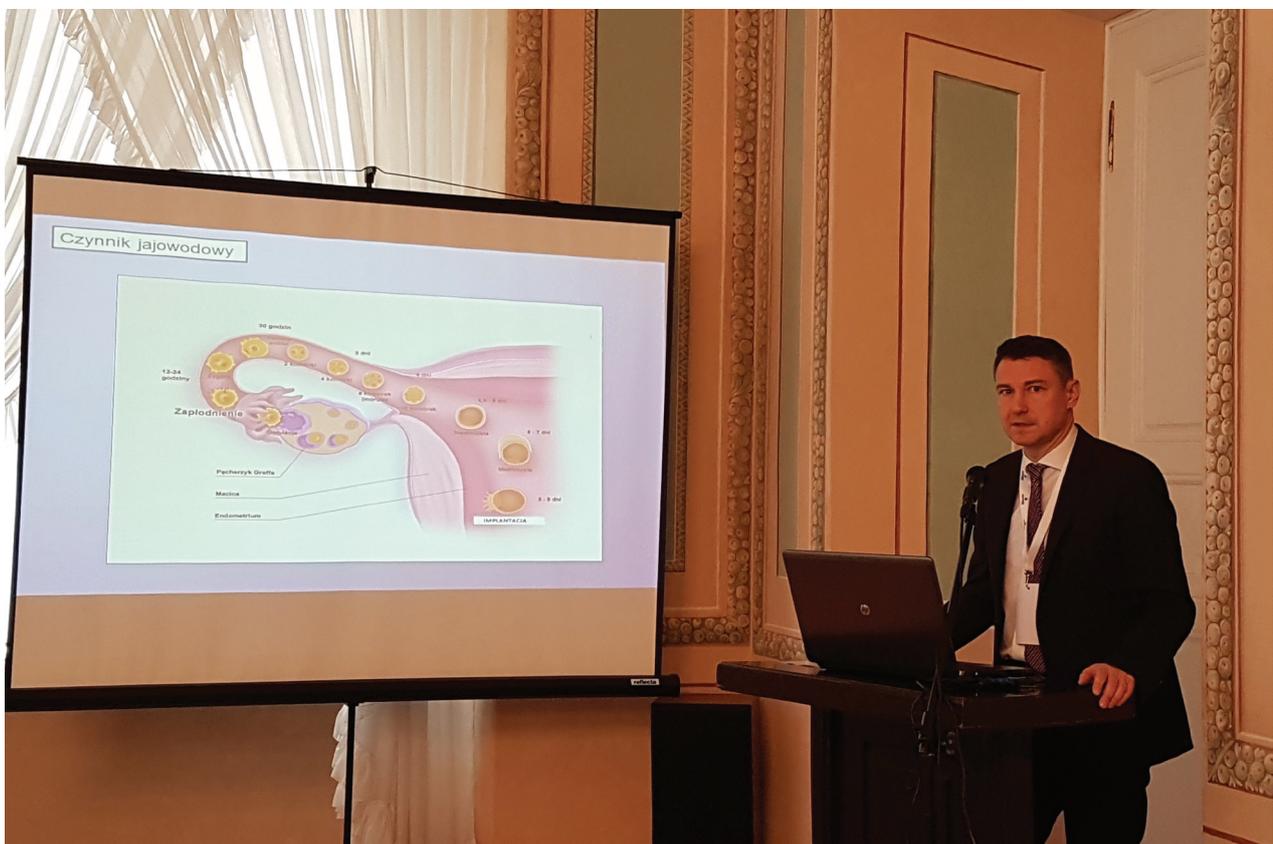


**Photo 2.**

Moderator of the session Associate Professor Igor Soroczynski (Ukraine), Associate Professor Grzegorz Polak (Poland), Associate Professor Stanisław Horak-Regional consultant in the field of gynecological endocrinology and reproduction for Silesia



**Photo 3.**  
Lecture of Dr. Krzysztof Pyra



**Photo 4.**  
Lecture of Asistant Professor Grzegorz Polak

Another very interesting lecture entitled "The consent to participate in the medical experiment as a manifestation of decision autonomy of the patient" was led by Wojciech Lis. He discussed the voluntary consent of patients taking part in the study and how this consent influences the development of medicine. Particular attention has been paid to the fact that the lack of opposition to participation in a medical experiment is not equivalent to consent. The great autonomy of patients who agreed to participate in the medical experiment was emphasized.

After a short break the gathered guests returned to a small room where Marcin Jurewicz talked about the legal aspects of nanomedicine. The most fashionable recent times of the topic has been with great curiosity received by conference participants. Mr. Marcin Jurewicz at the beginning of his lecture introduced the topic of nanomedicine and nanotechnology, and then went through the legal aspects of the use of nanotechnology. Mr. Jurewicz recalled that the use of nanotechnology in medicine is covered by the European Commission and the

European Medicines Agency and, of course, national governments.

The "New Medical Technologies" session led by Professor Iwona Bojar began with the speech of Mr. Doc Sławomir Woźniak, entitled "The Role of Ultrasound in Ultrasonography in Gynecological Diagnosis" The results of their own study of 333 pregnant patients were presented. The aim of the study was to determine the potential significance of elastographic assessment of the internal cervix in predicting the risk of spontaneous preterm birth in healthy pregnant women without maternal obstetric history. The results of authors show that ultrasonographic assessment of intrauterine cervical elasticity predicts preterm birth in healthy pregnant women.

The audience welcomed the lecture of Izabela Machorowska-Kiciak, who talked about the increase of fake medicines in Poland. Surprisingly, Europe has been flooded with drugs of unknown origin and in our country every hundred drugs are falsified. It is easy to guess that such drugs do not have a therapeutic effect, and may even be harmful to our health. There is no



**Photo 5.**  
Lecture of Dr. Szymon Bakalczuk

possibility to write about all very interesting lectures of this session. Some of the more innovative topics that emerged at this session were: "Application of uterine embolization in the management of pregnancy in the neighbor after cesarean section", "Knowledge of pregnant women about supplementation of selected micro and macro elements" and "Presentation of achievements and new directions Action of the International Center for Women's Health in Ukraine ", the last topic was presented by Mrs Olga Paliy, a guest from Ukraine.

It is worthwhile to note from the student session, "Segmentation, 3D visualization and printing of liver models as rapid prototyping in medical education", during which visitors could see close-ups of liver models derived from 3D printing.

The next part of the conference touched on the topic of broadly understood health and medical tourism. The lectures focused on the health resorts

and the benefits of treatment outside of the home. Health tourism is not only a spa, but also Spa and Wellnes. This session also featured lectures on nursing topics, an example is the presentation by Kinga Kulczycka about the factors that cause the workload of a nurse in the POZ. Kinga Kulczycka in a clear way presented the defects of the work of nursing staff employed in primary care.

The IV Science and Training Conference "Days of Three Cultures in Medicine" ended with a poster session. Participants presented a 9 posters which dealt with the topic of electrical engineering and computer science in medicine. The high level of interest made that the content of this year's edition of the conference was high. After the meeting the participants had the opportunity to visit the Old Town in Lublin with a guide.



**Photo 6.**  
Conference participants at the lecture